

Title (en)  
Strand anchor

Title (de)  
Litzenanker

Title (fr)  
Tirant d'ancrage

Publication  
**EP 2543817 A3 20160525 (DE)**

Application  
**EP 12170918 A 20120606**

Priority  
DE 102011078767 A 20110707

Abstract (en)  
[origin: EP2543817A2] The anchor has longitudinal channels (4) defined between wires (3) of a central strand (2) and allowing discharge of air to outside through the strand when curable material is injected into a bore hole formed in a rock. The wires exhibit different diameters, where the diameter of one wire is larger than 10-30 percentages of the diameter of the other wire. An anchor plate is supported by an anchor head for placement onto the rock. The wires are held concentrically with respect to the strand by annular spacers (8). An independent claim is also included for a method for fastening a strand anchor.

IPC 8 full level  
**E21D 20/02** (2006.01); **E21D 21/00** (2006.01)

CPC (source: EP US)  
**E21D 20/028** (2013.01 - EP US); **E21D 21/0026** (2013.01 - EP US); **E21D 21/006** (2016.01 - EP US)

Citation (search report)

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- [X] US 4289427 A 19810915 - ROLSTON JOHN A
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- [Y] US 5230589 A 19930727 - GILLESPIE HARVEY D [US]
- [X] WO 2010019971 A1 20100218 - SANDVIK MINING & CONSTR OY [ZA], et al
- [X] DE 20206551 U1 20020808 - SUSPA SPANNBETON GMBH [DE]
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- [Y] US 5749681 A 19980512 - DOIDGE JEFFREY [GB], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2543817 A2 20130109; EP 2543817 A3 20160525**; AU 2012204050 A1 20130124; DE 102011078767 A1 20130110;  
RU 2012128347 A 20140120; US 2013011205 A1 20130110

DOCDB simple family (application)  
**EP 12170918 A 20120606**; AU 2012204050 A 20120709; DE 102011078767 A 20110707; RU 2012128347 A 20120706;  
US 201213543301 A 20120706